

FIG. 1

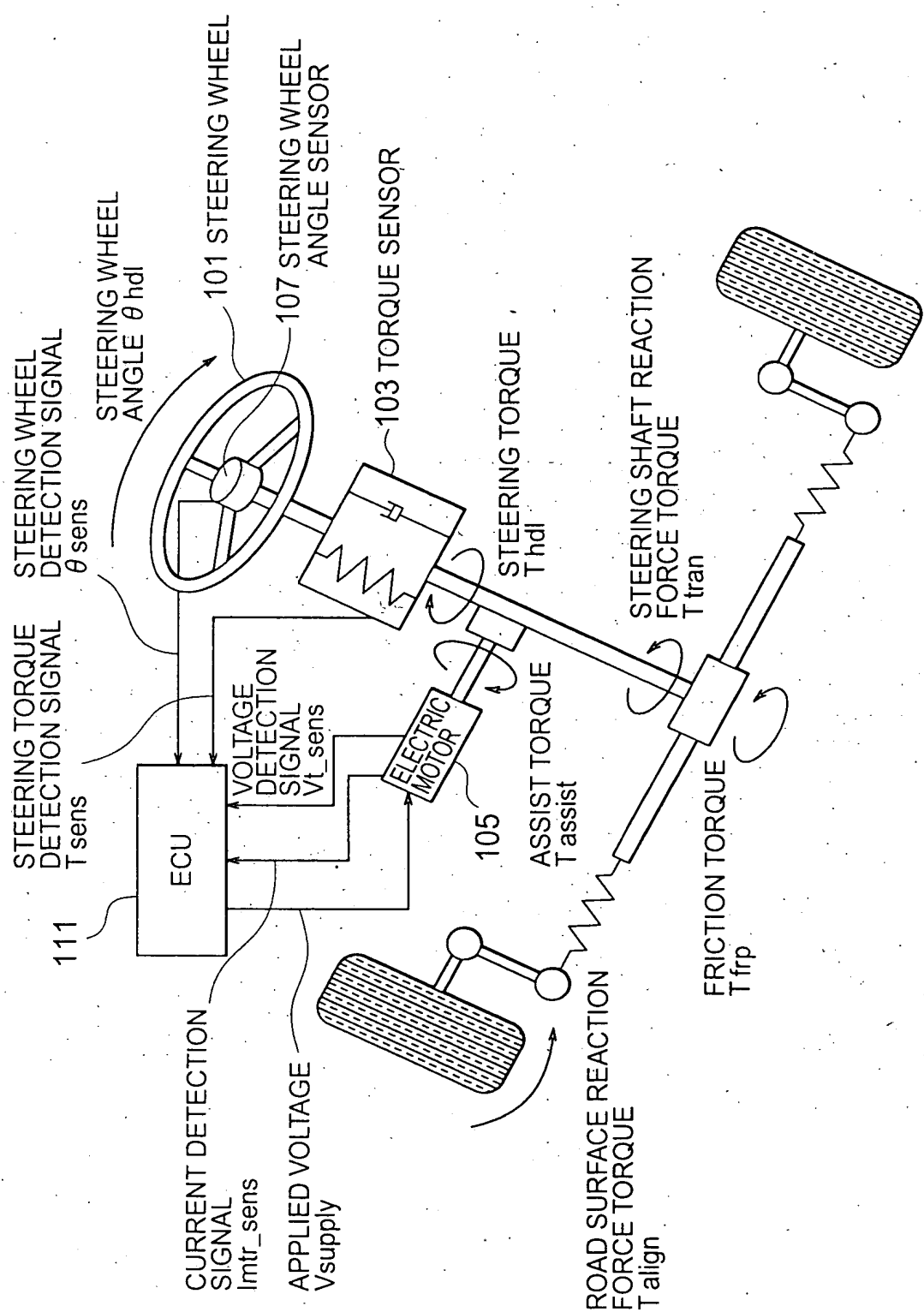


FIG. 2

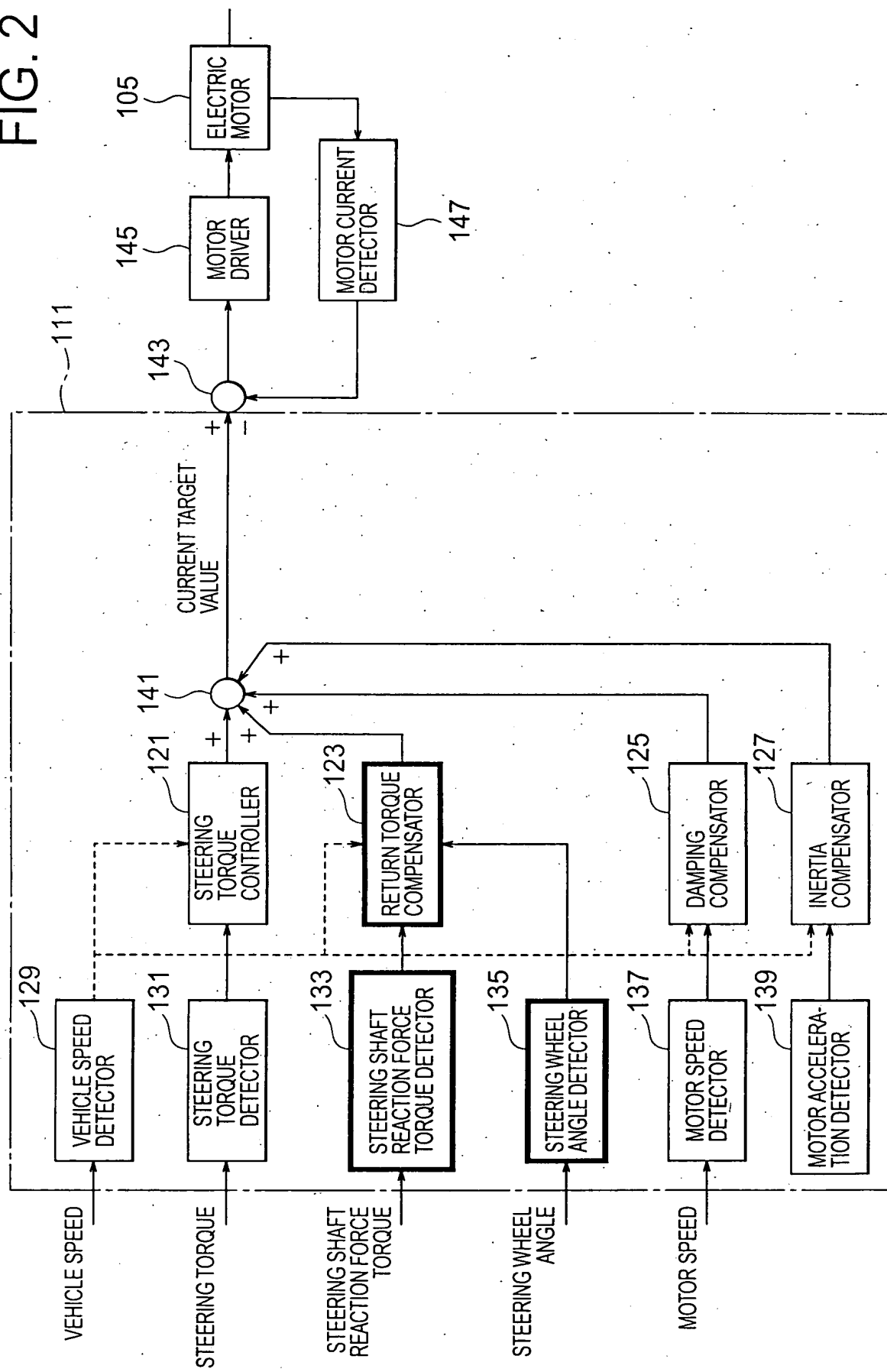


FIG. 3

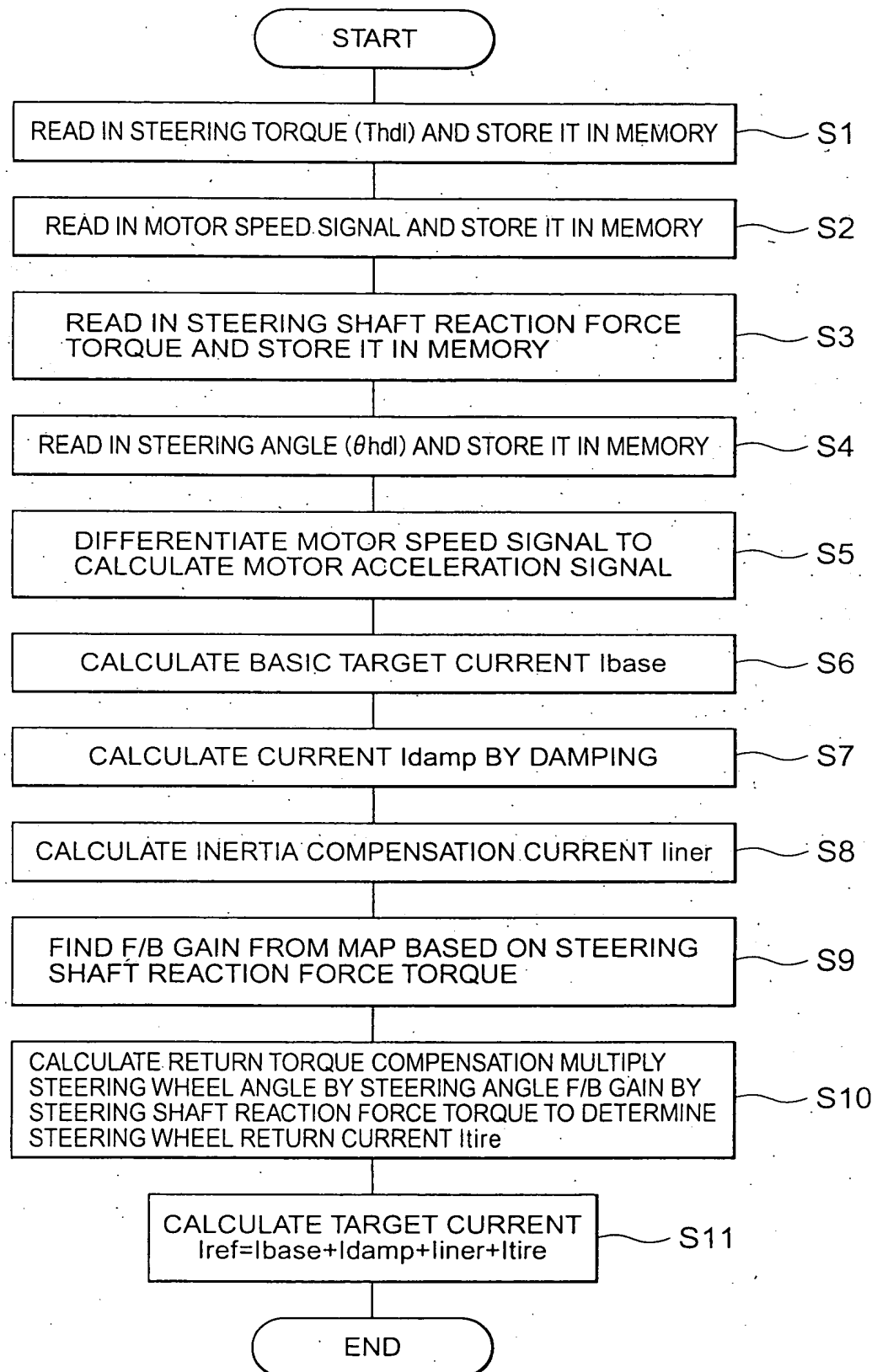


FIG. 4

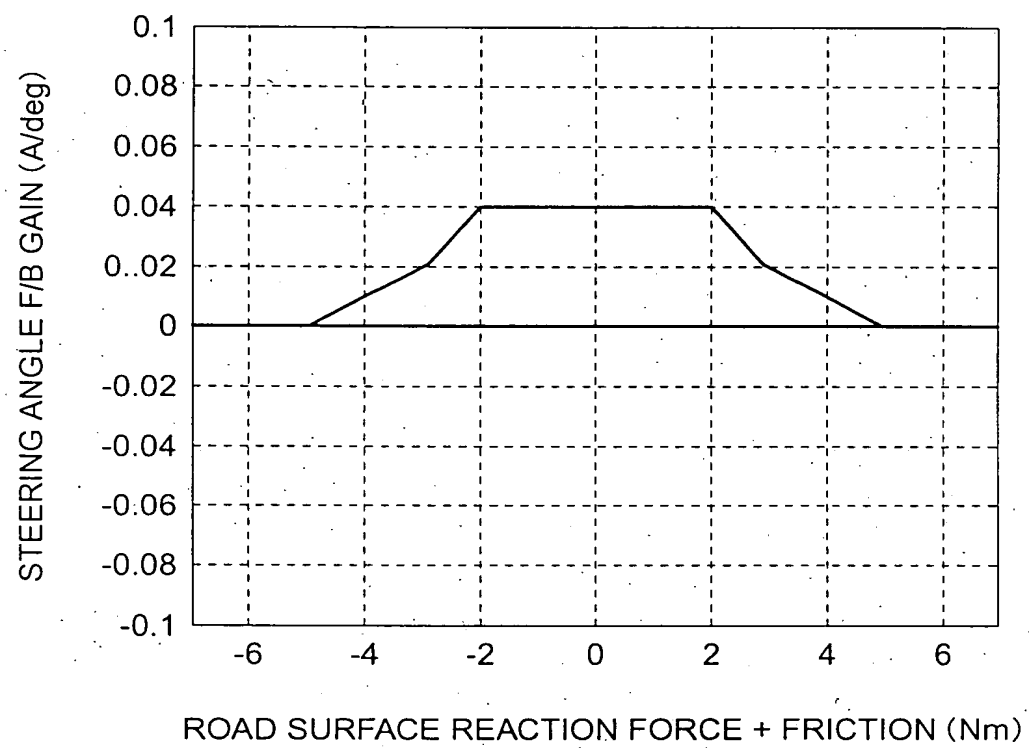


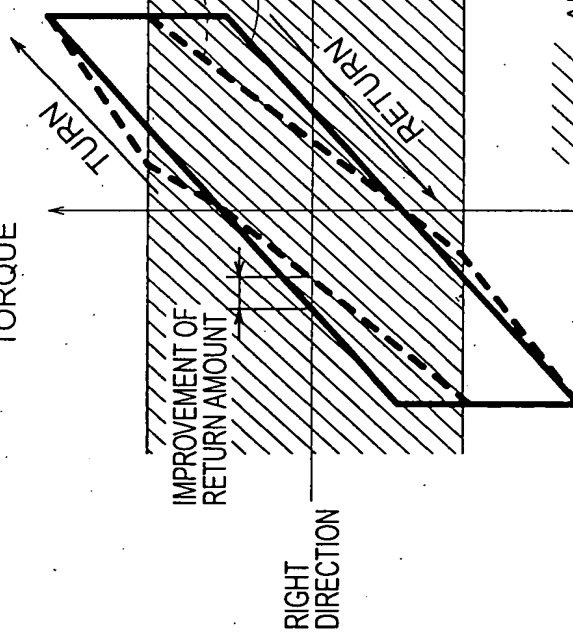
FIG. 5A

CORRECTED STEERING WHEEL
ANGLE F/B COMPENSATION

(PRESENT INVENTION)

— RELATIONSHIP BETWEEN STEERING WHEEL ANGLE —
AND STEERING SHAFT REACTION FORCE TORQUE

STEERING SHAFT
REACTION FORCE
TORQUE



IMPROVEMENT OF
RETURN AMOUNT

RIGHT
DIRECTION

STEERING WHEEL
ANGLE

LEFT DIRECTION

AFTER
COMPENSATION

BEFORE
COMPENSATION

BEFORE
COMPENSATION

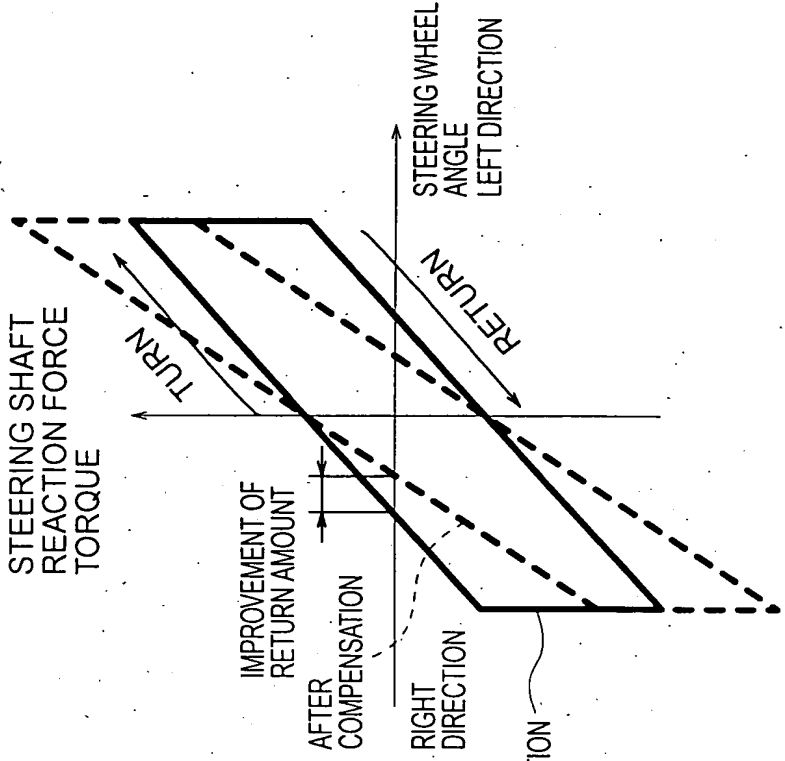
AREA WHERE GAIN
IS SET LARGE

FIG. 5B

SIMPLE STEERING WHEEL
ANGLE F/B COMPENSATION

(CONVENTIONAL METHOD)

STEERING SHAFT
REACTION FORCE
TORQUE



IMPROVEMENT OF
RETURN AMOUNT

AFTER
COMPENSATION

RIGHT
DIRECTION

STEERING WHEEL
ANGLE

LEFT DIRECTION

BEFORE
COMPENSATION

FIG. 6A

CORRECTED STEERING WHEEL
ANGLE F/B COMPENSATION

(PRESENT INVENTION)

— RELATIONSHIP BETWEEN STEERING WHEEL ANGLE AND STEERING
SHAFT REACTION FORCE TORQUE (SLIPPERY ROAD SURFACE)

STEERING SHAFT
REACTION FORCE
TORQUE

TURN

IMPROVEMENT OF
RETURN AMOUNT

RIGHT
DIRECTION

STEERING WHEEL
ANGLE
LEFT DIRECTION

RETURN

AFTER
COMPENSATION
BEFORE
COMPENSATION

AREA WHERE GAIN
IS SET LARGE

FIG. 6B

SIMPLE STEERING WHEEL
ANGLE F/B COMPENSATION

(CONVENTIONAL METHOD)

STEERING SHAFT
REACTION FORCE
TORQUE

TURN

IMPROVEMENT OF
RETURN AMOUNT

AFTER
COMPENSATION

RIGHT
DIRECTION

STEERING WHEEL
ANGLE
LEFT DIRECTION

RETURN

BEFORE
COMPENSATION

FIG. 7

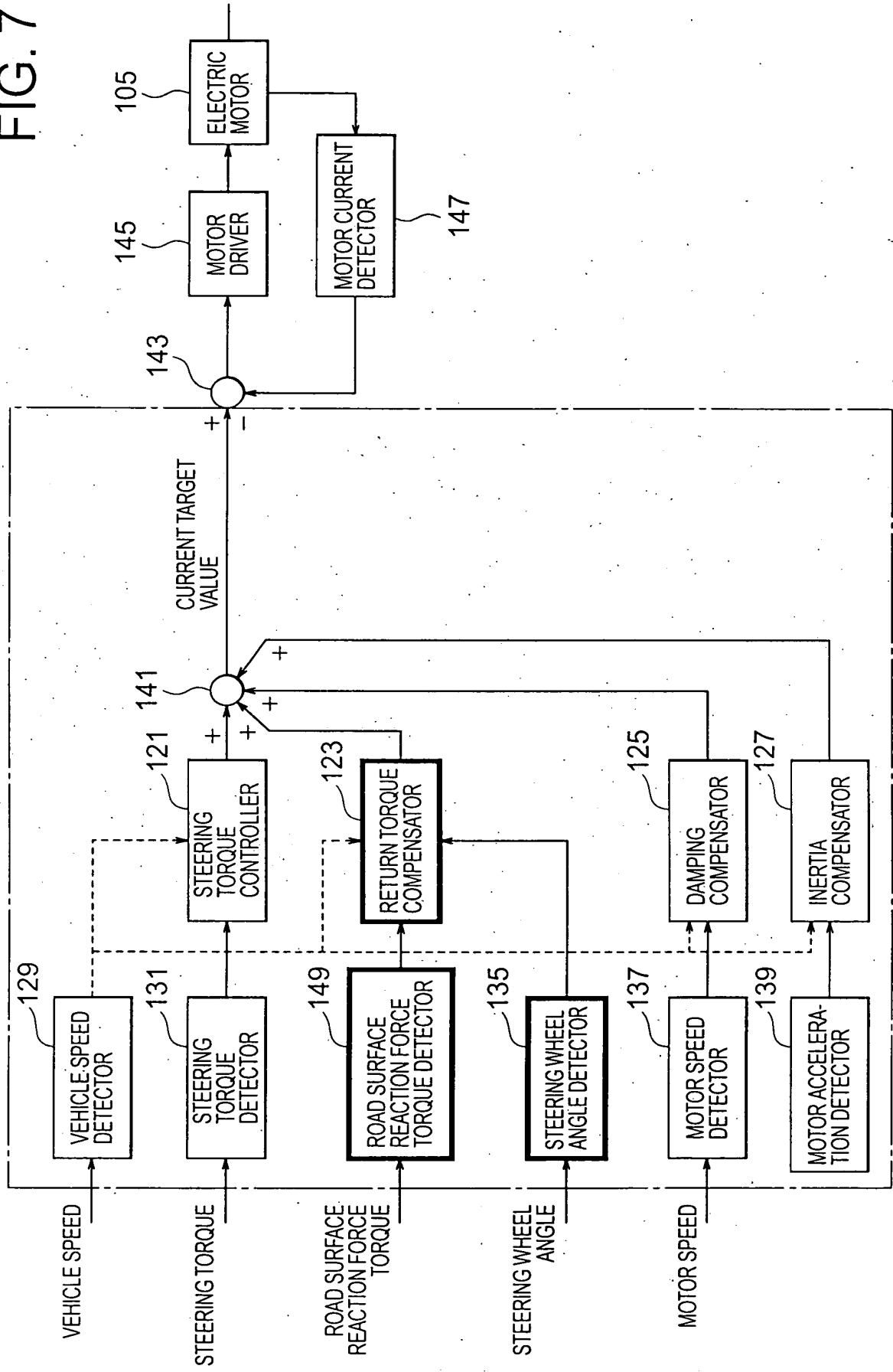


FIG. 8

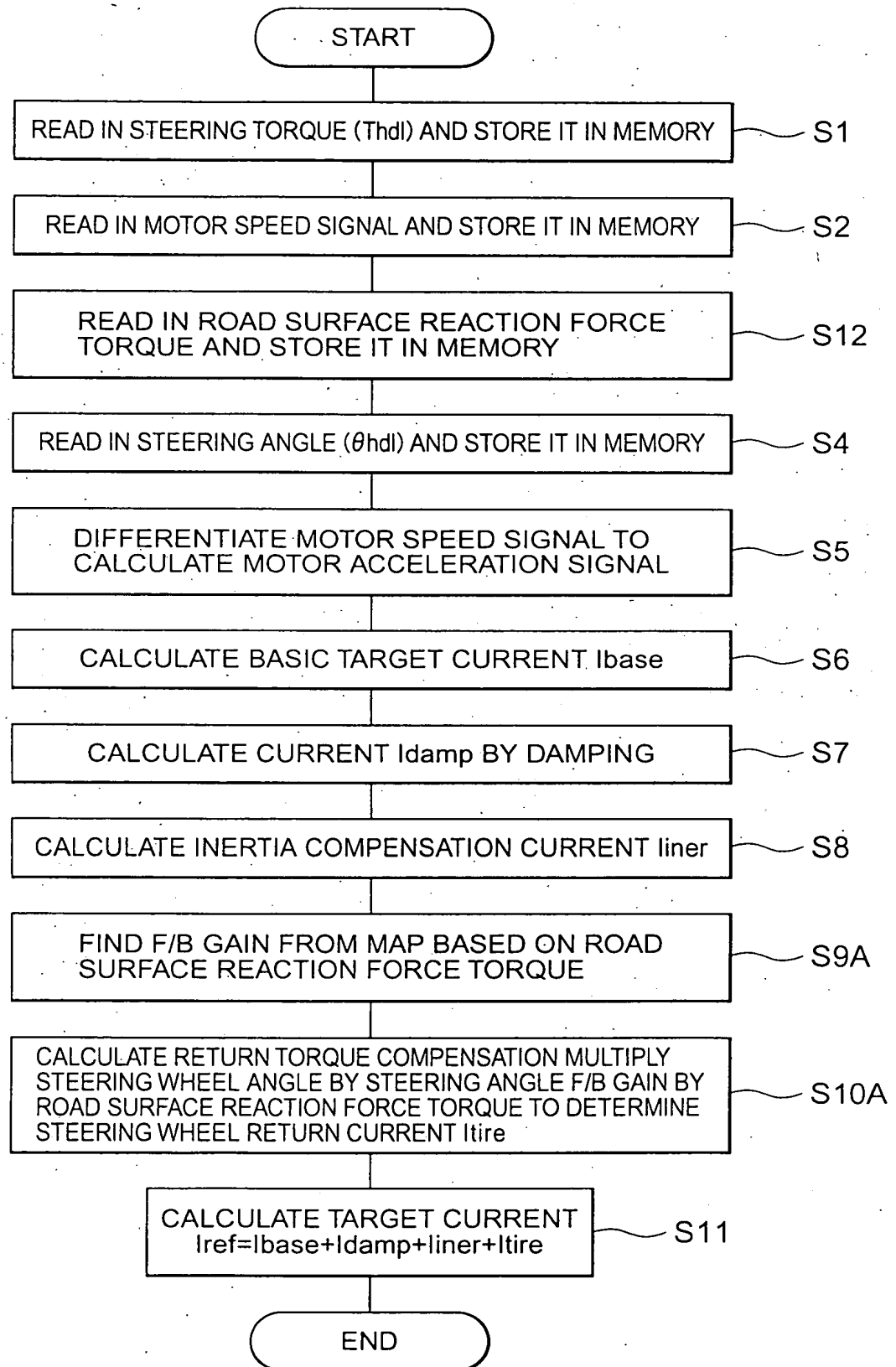


FIG. 9

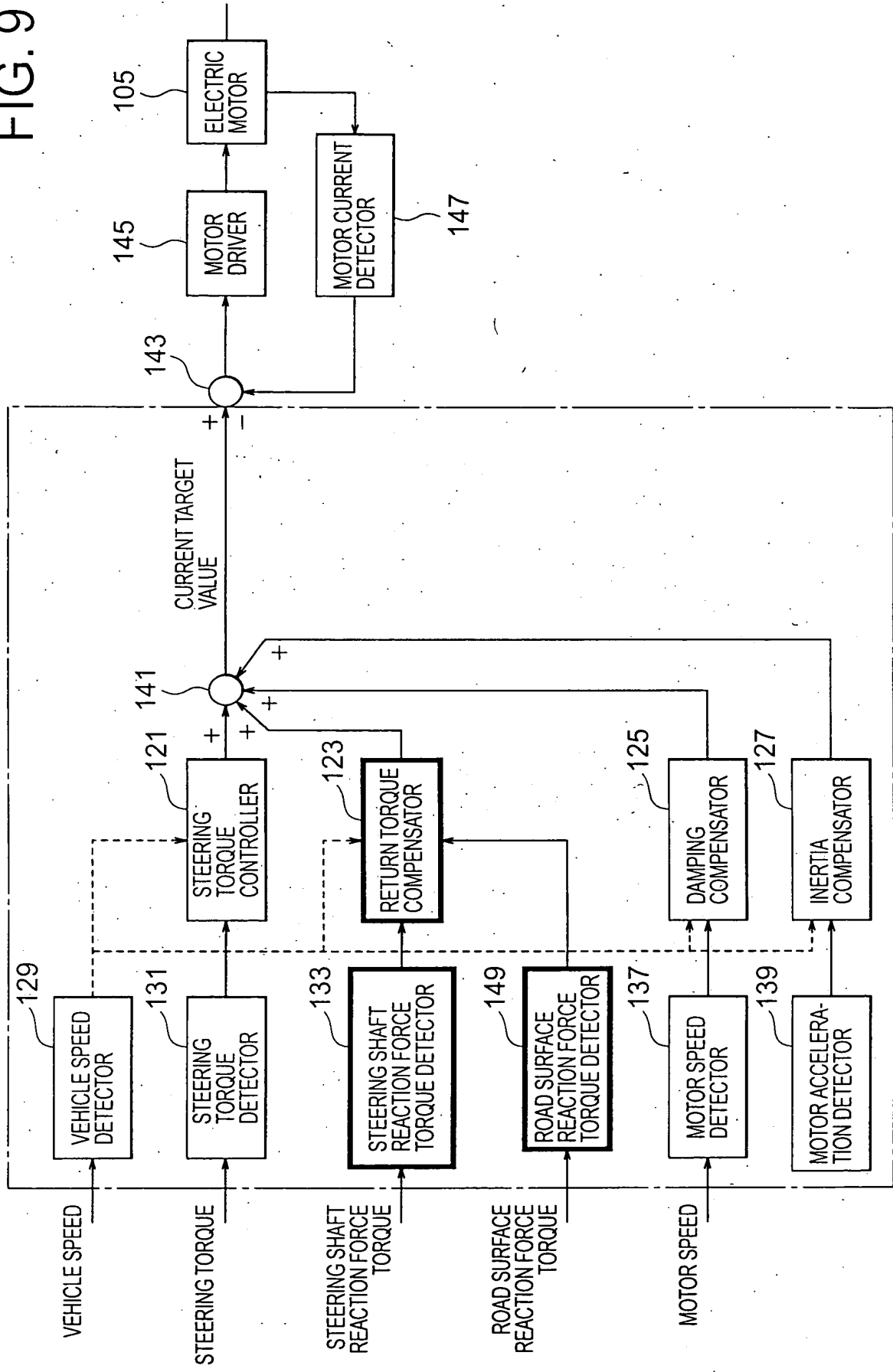


FIG. 10

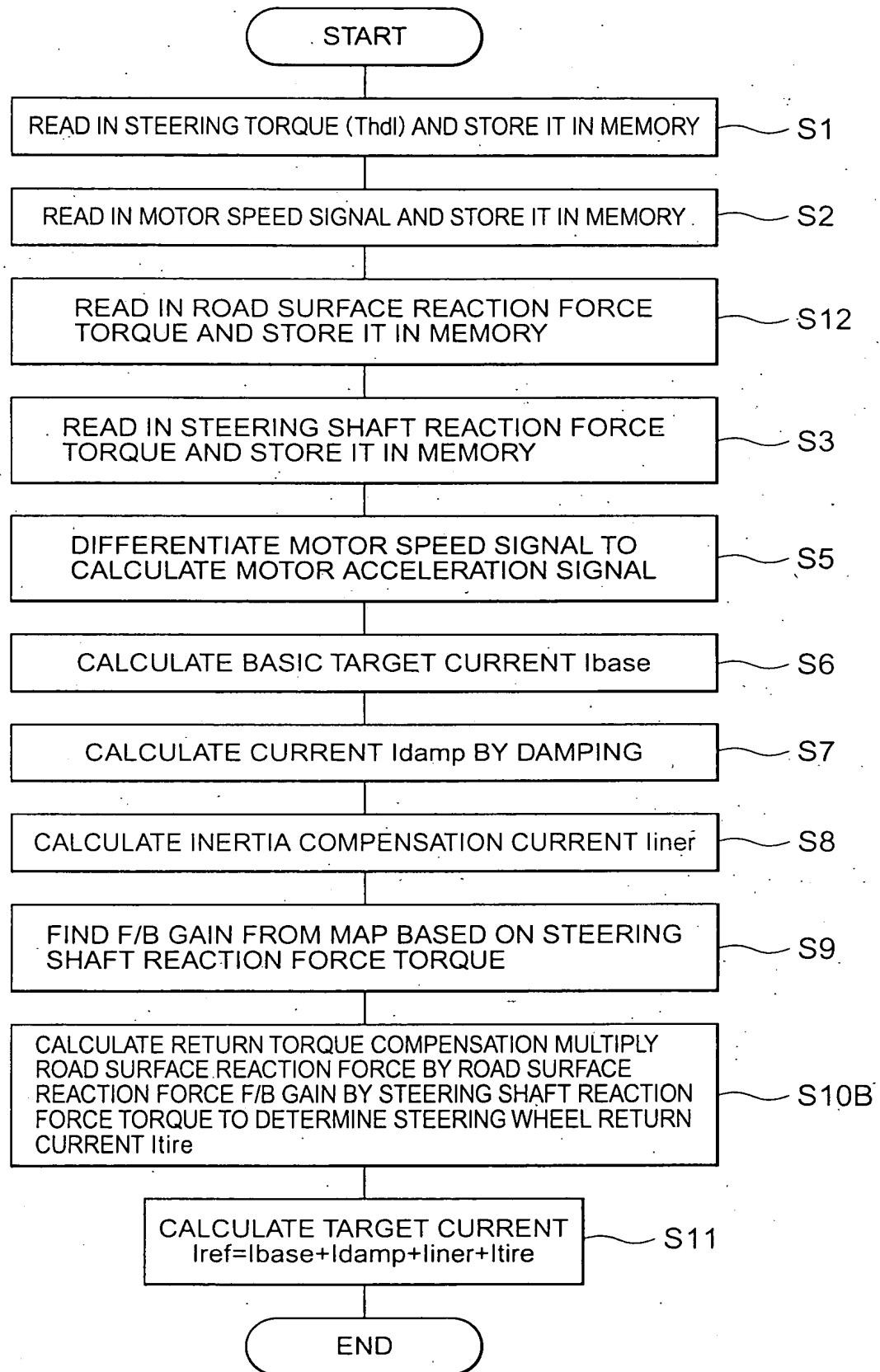


FIG. 11

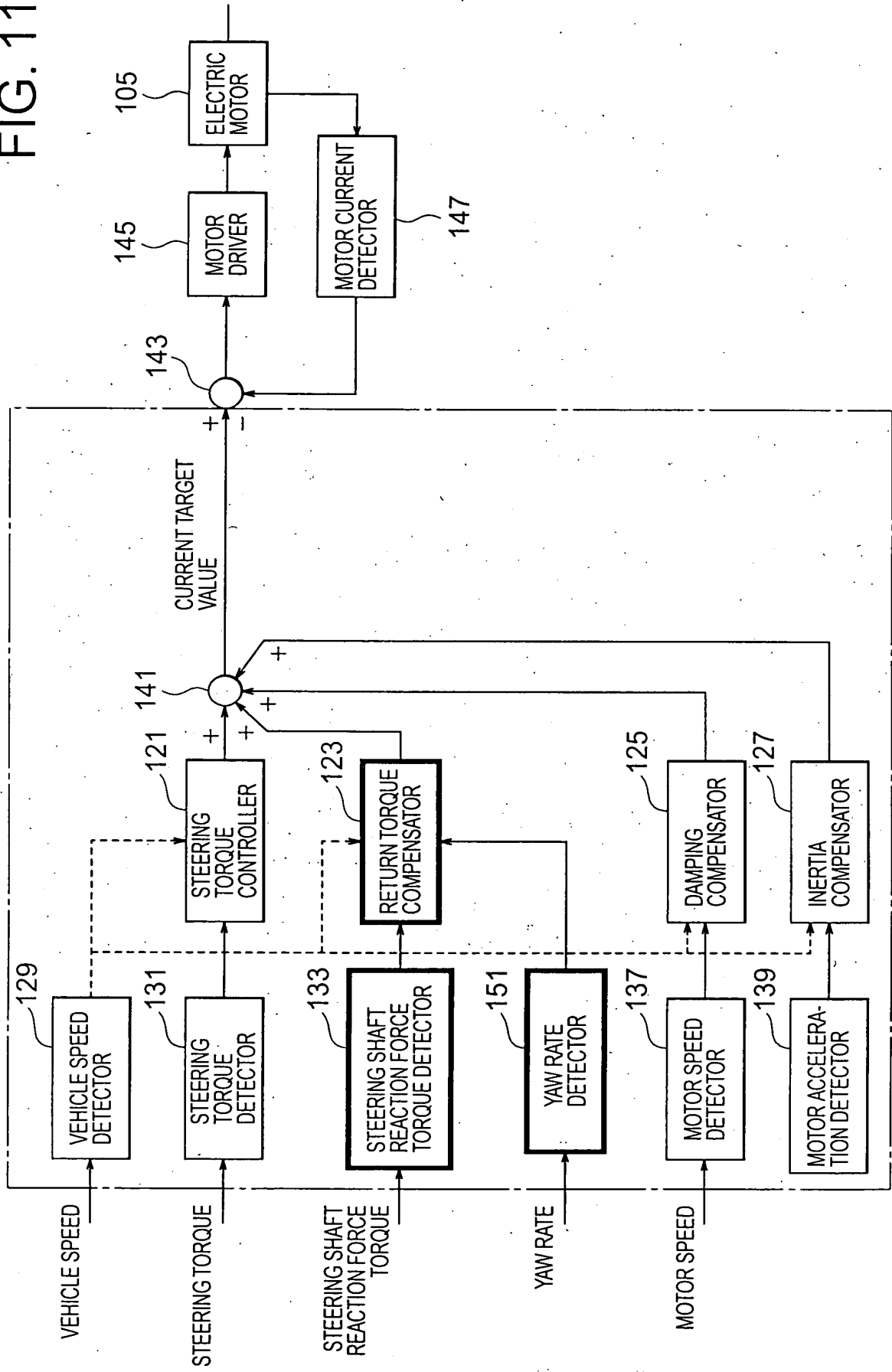


FIG. 12

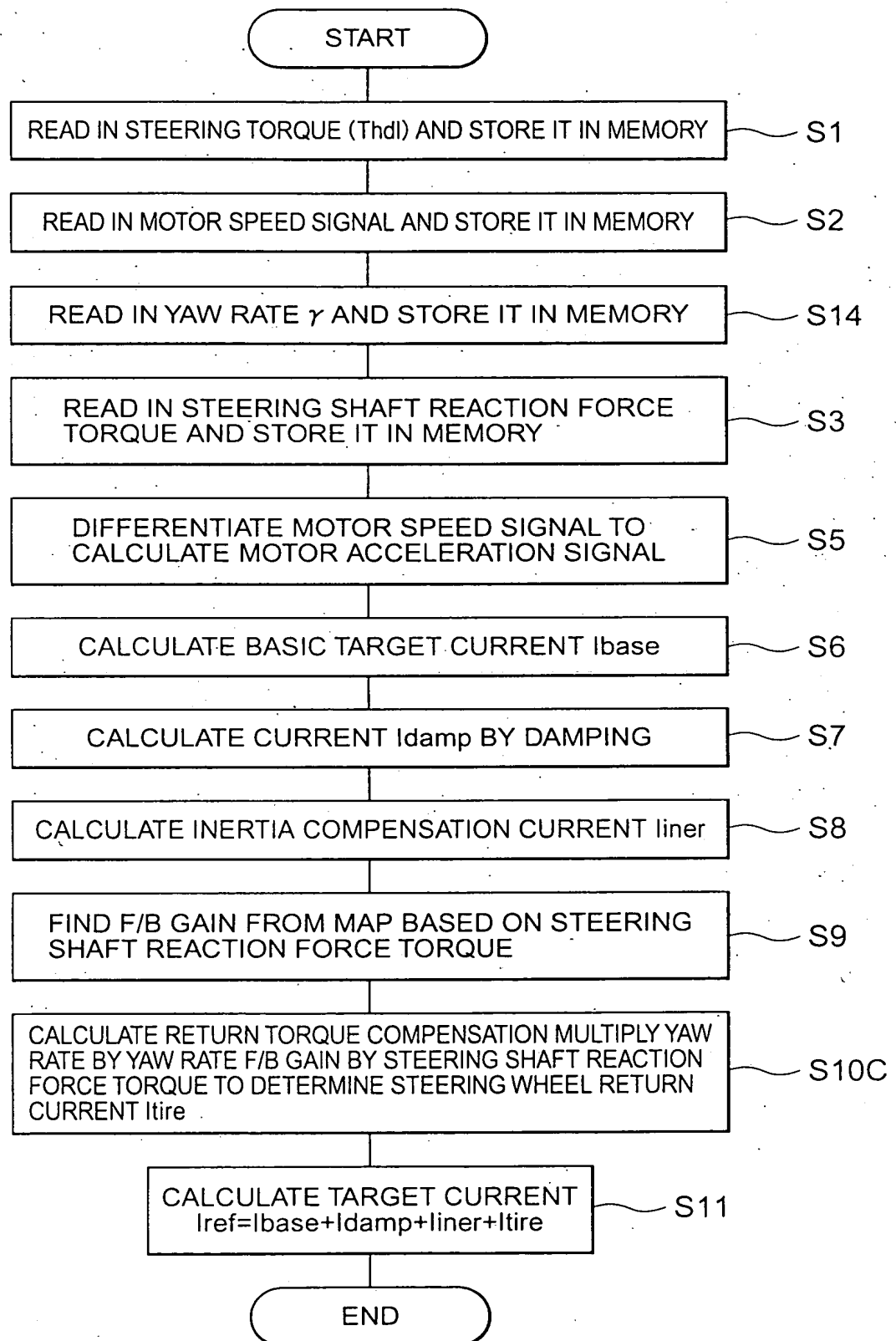


FIG. 13

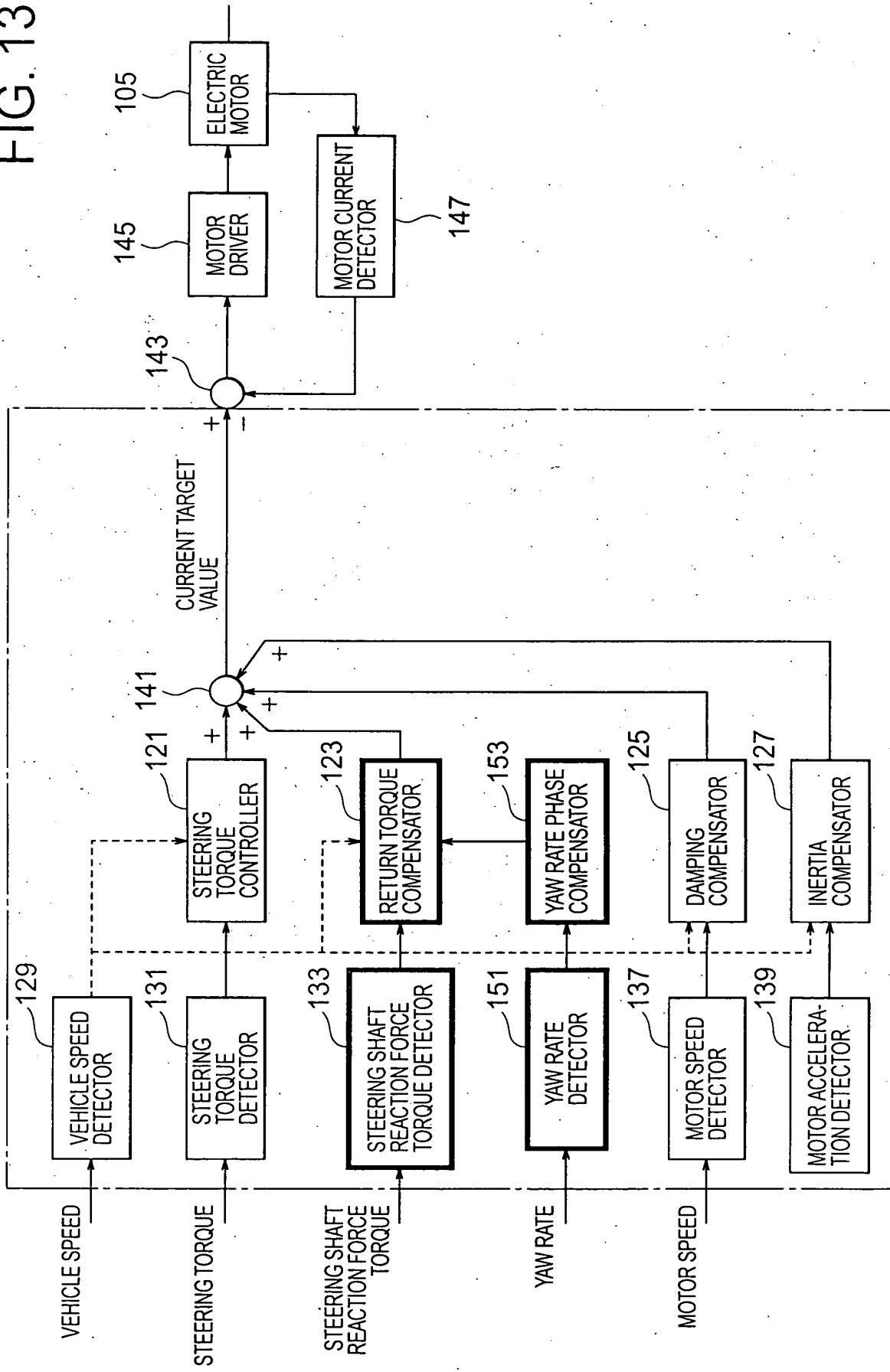


FIG. 14

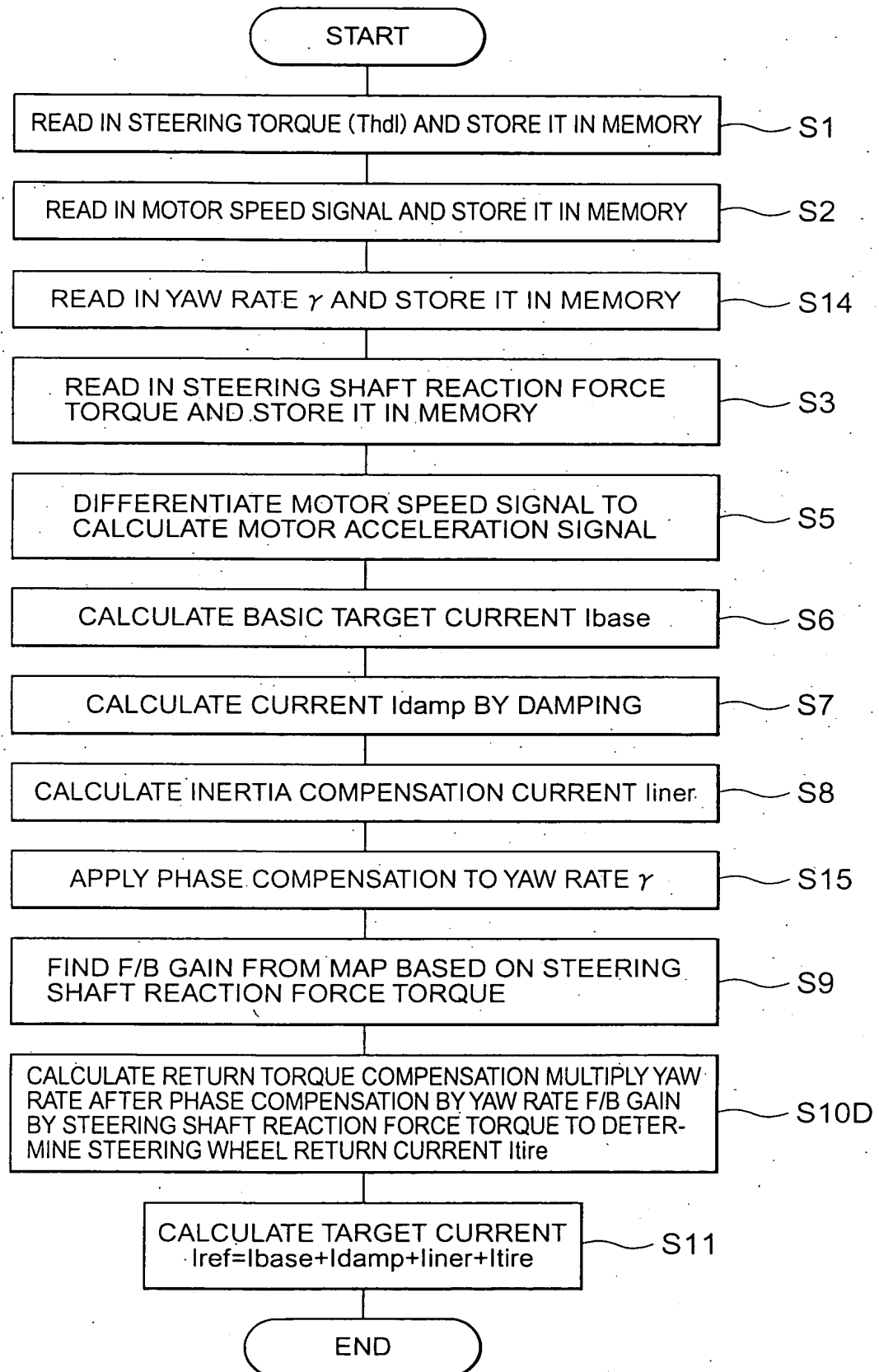


FIG. 15

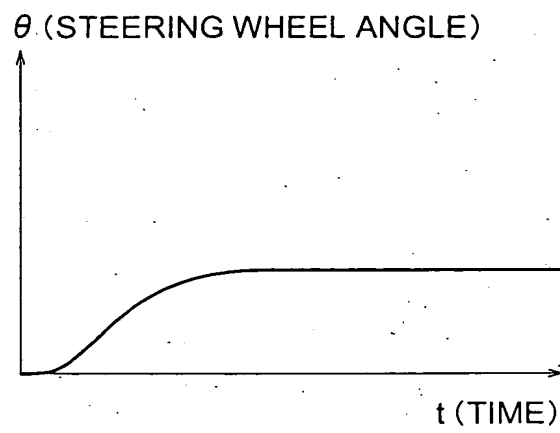


FIG. 16

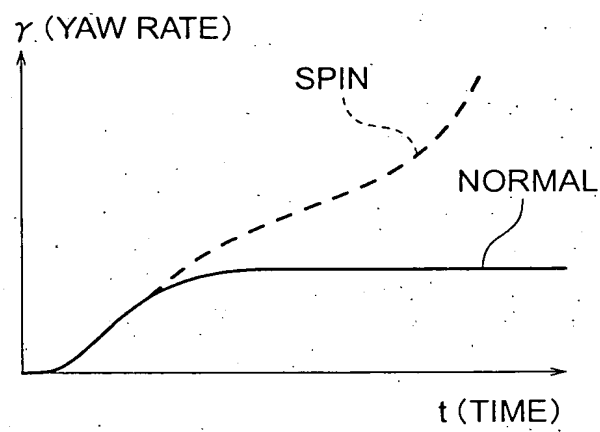


FIG. 17

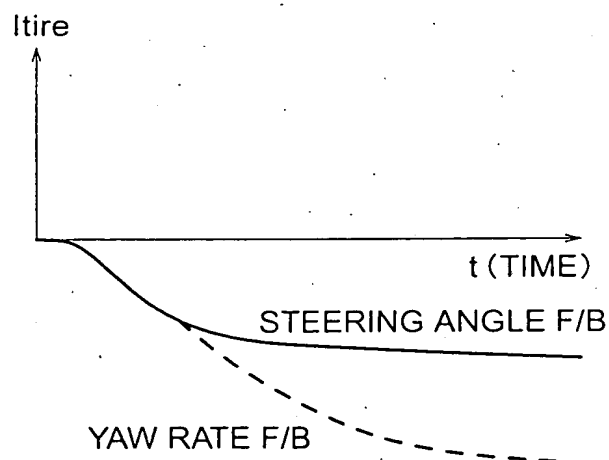


FIG. 18

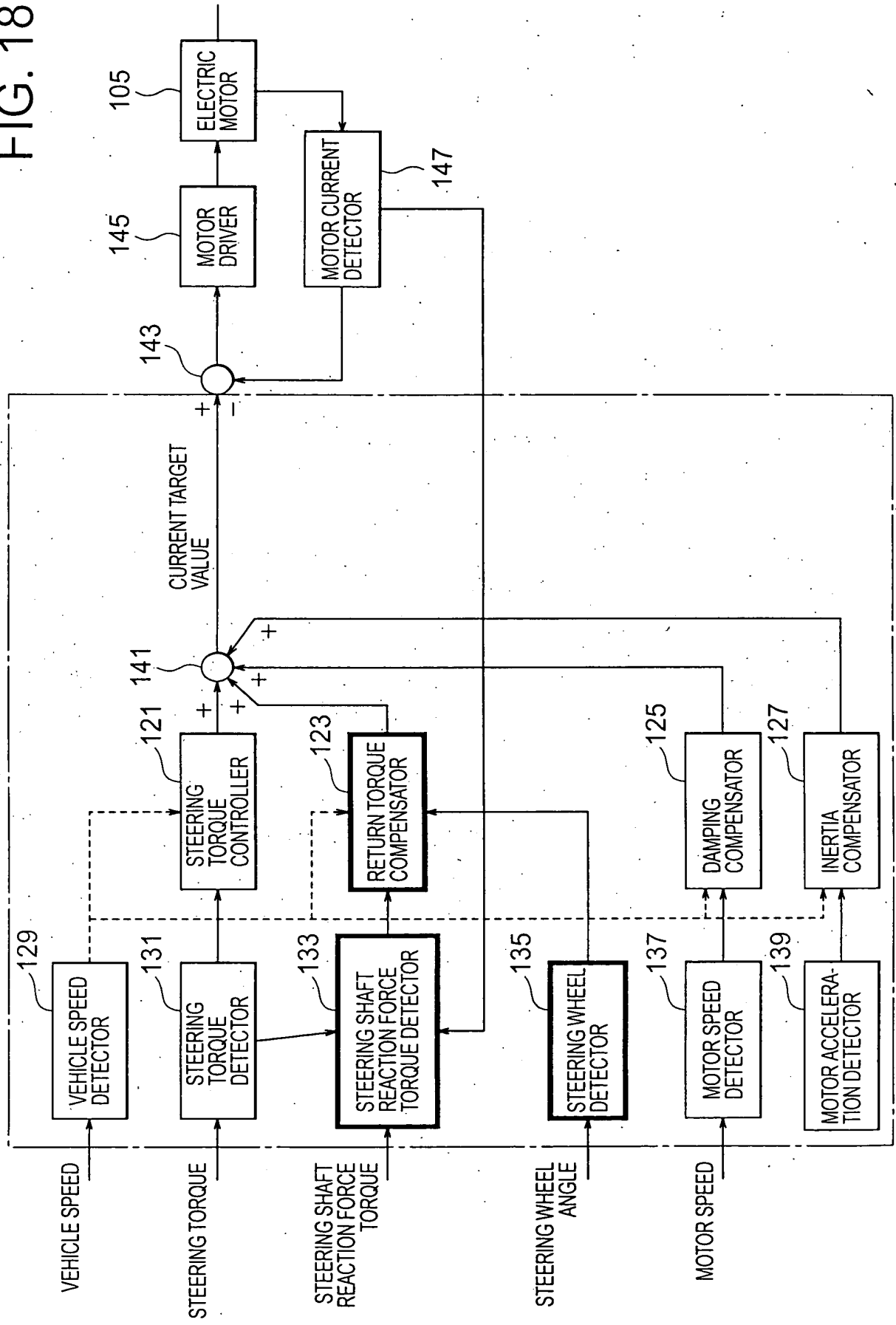


FIG. 19

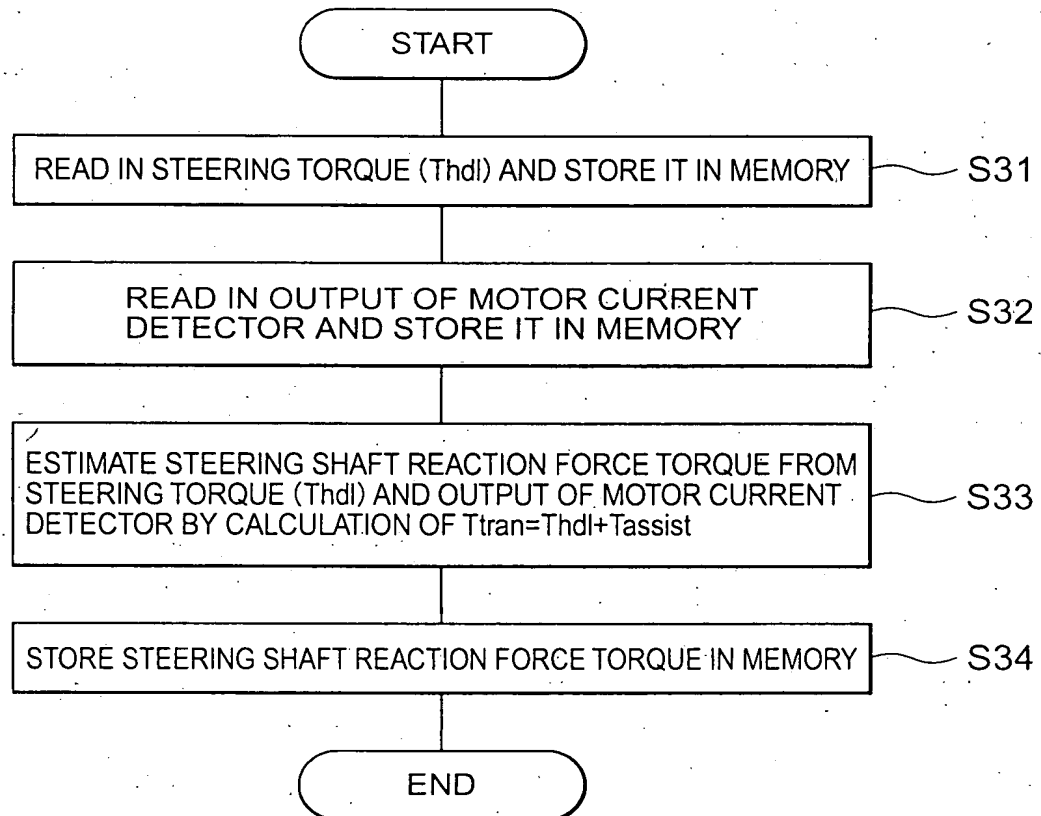


FIG. 20

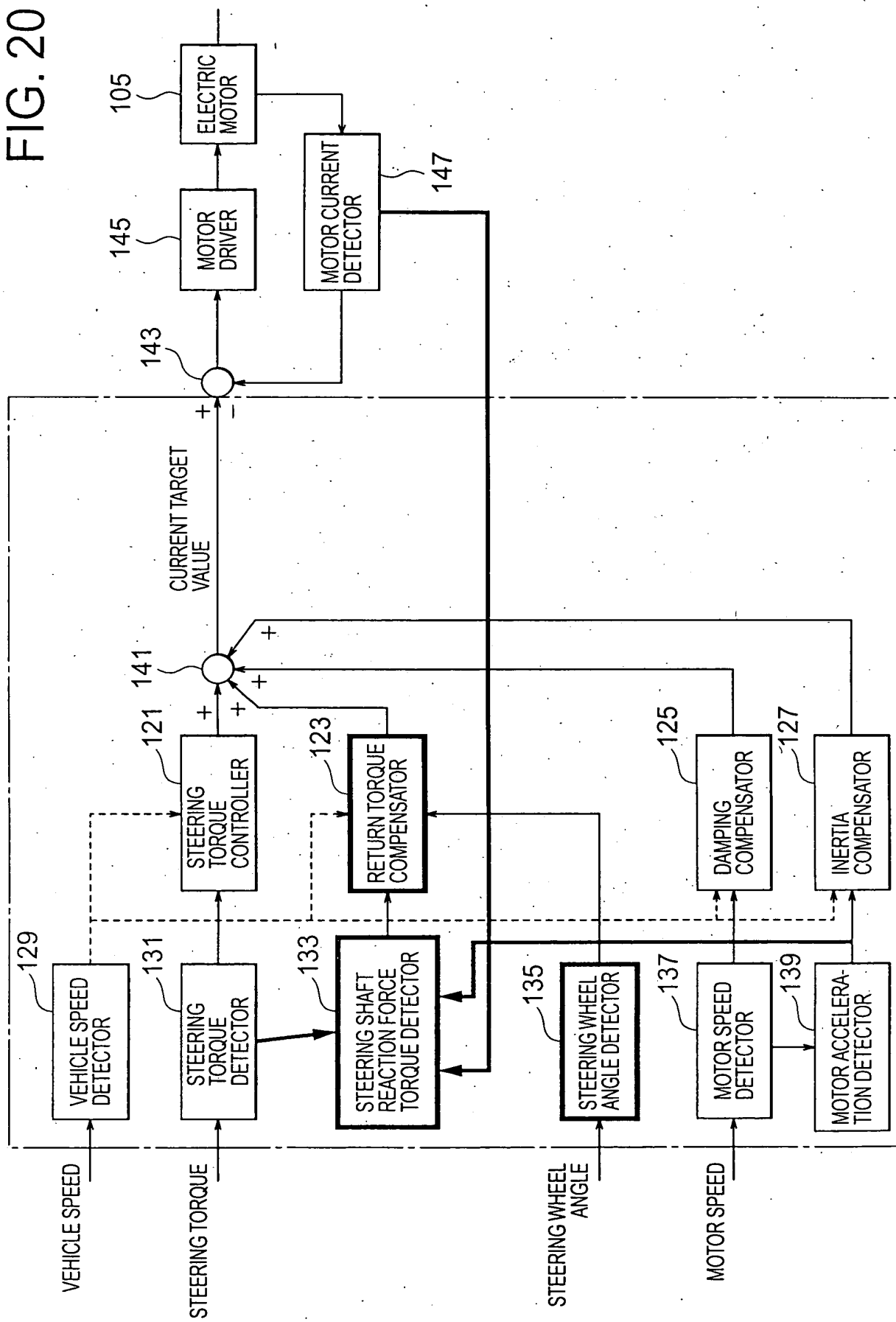


FIG. 21

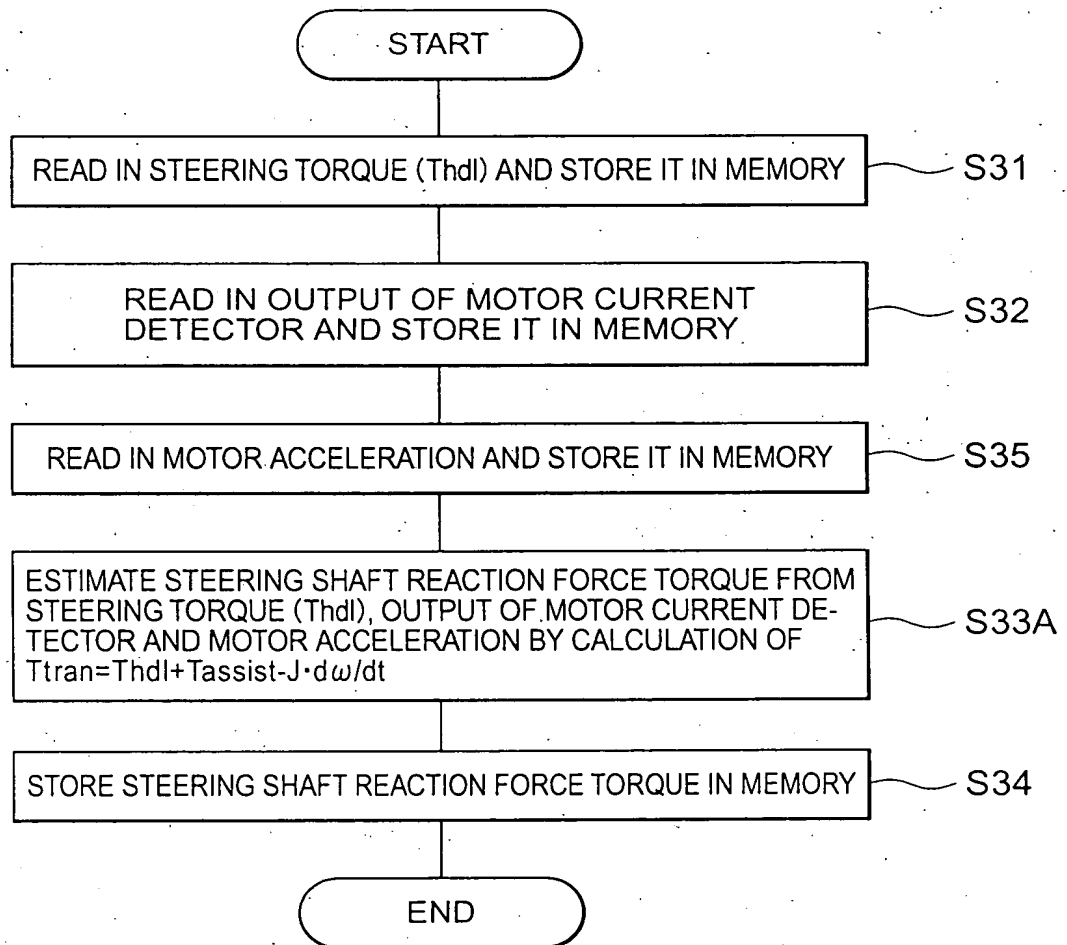


FIG. 22

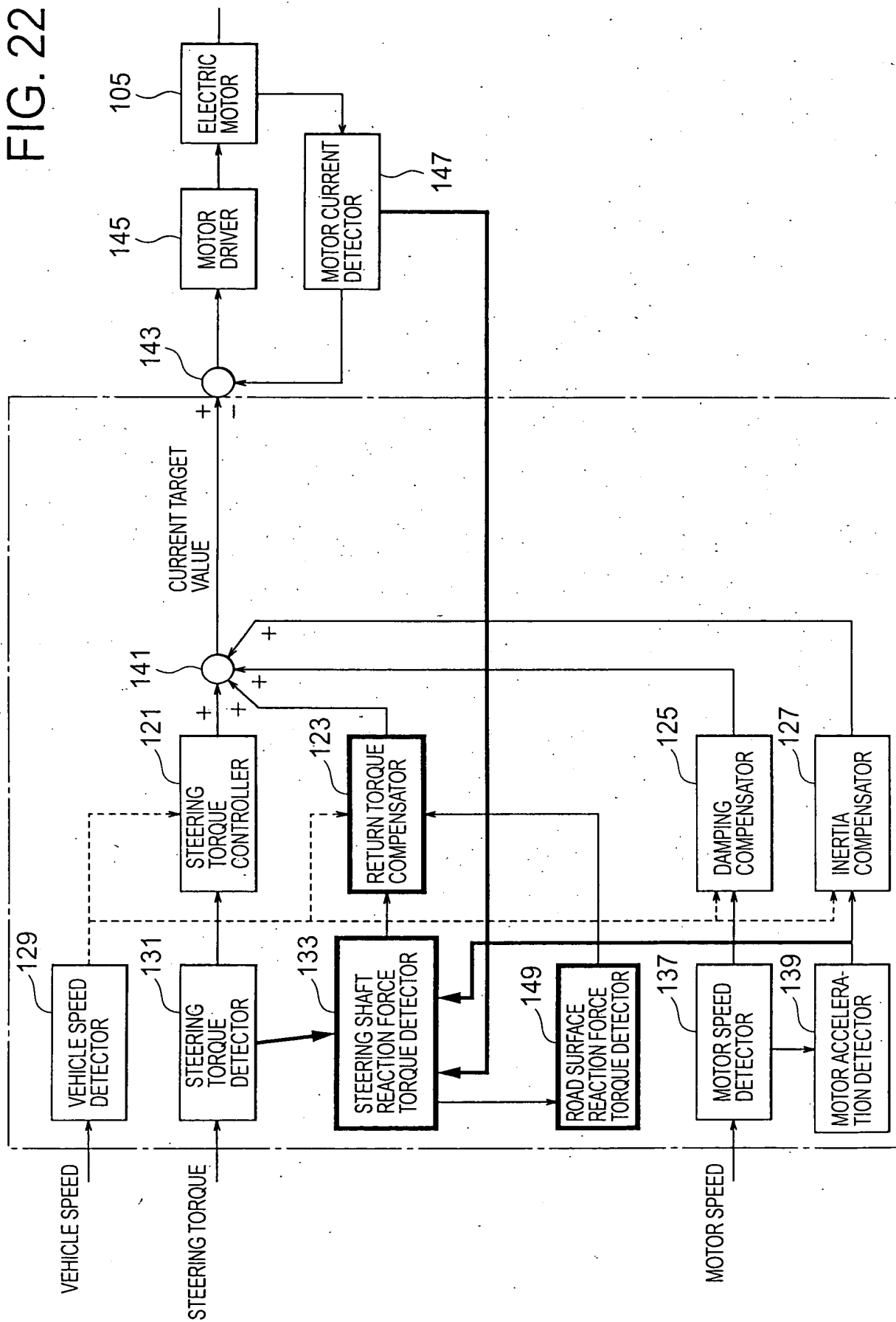


FIG. 23

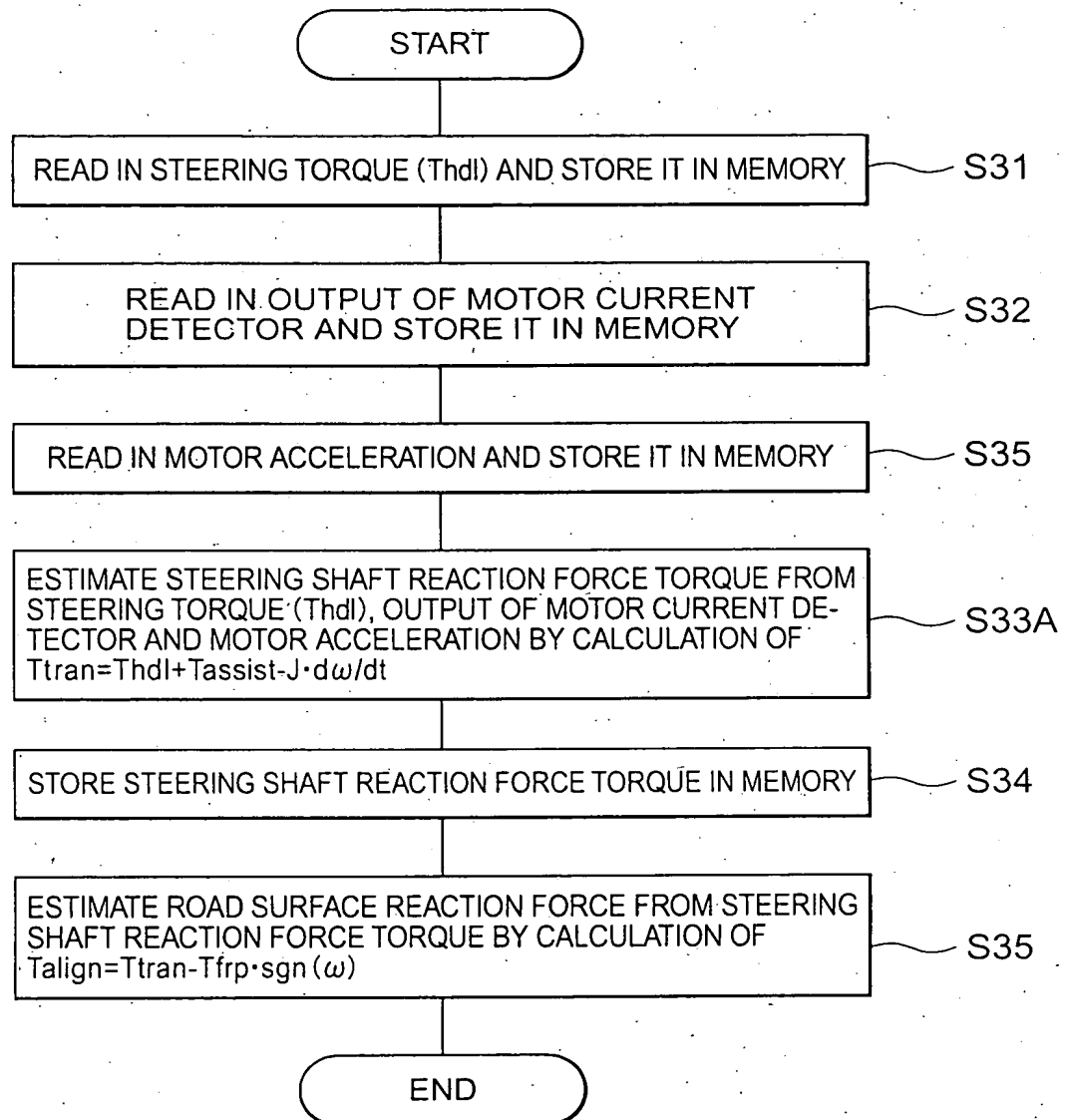


FIG. 24

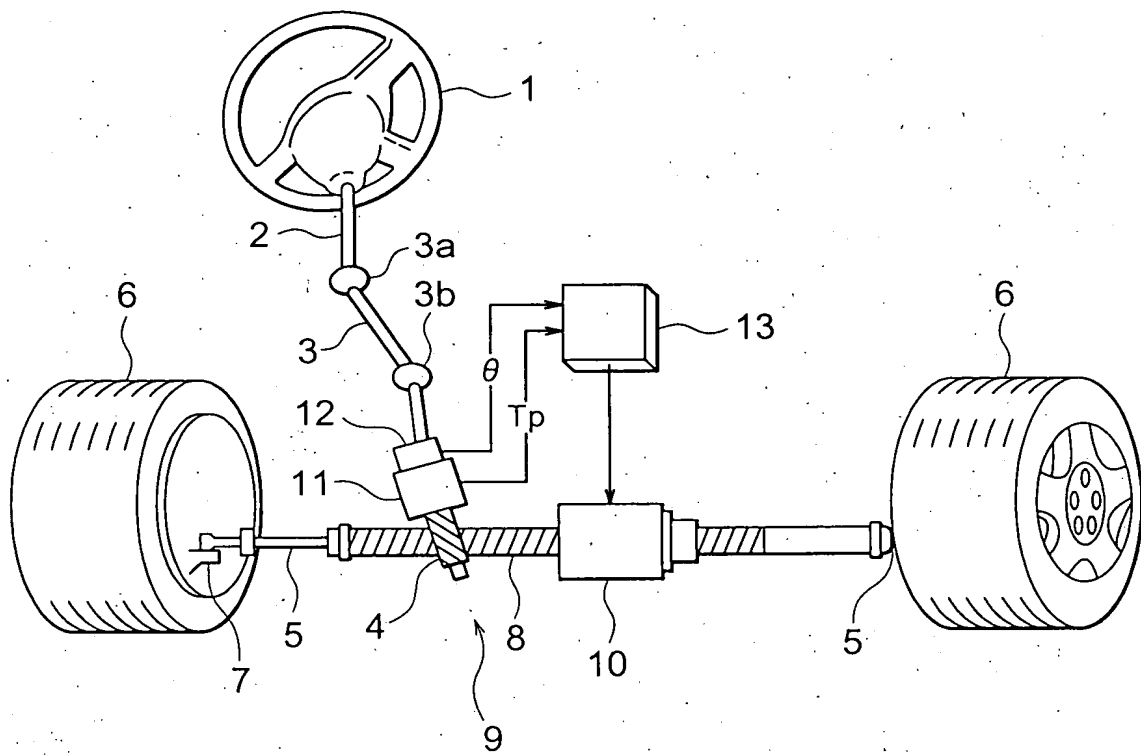


FIG. 25

